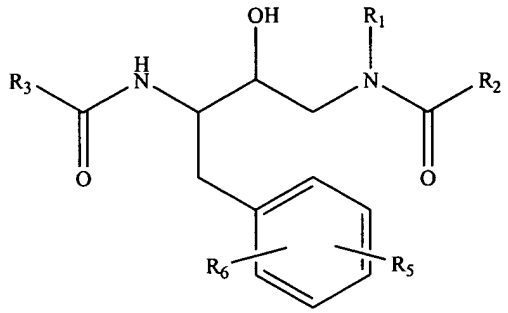
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 (previously presented): A method for modulating the processing of an amyloid precursor protein (APP), said method comprising contacting a composition containing said APP with an aspartyl protease inhibitor having the formula:



(I)

wherein:

R_1, R_2 and R_3 are members independently selected from the group consisting of alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl, substituted aryloxyalkyl, heteroaryl, substituted heteroaryl, heteroarylalkyl, substituted heteroarylalkyl, heterocycles, substituted heterocycles, heterocyclicalkyl and substituted heterocyclicalkyl; and

R_5 and R_6 are independently selected from the group consisting of hydrogen, halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl; or R_5 and R_6 and the carbons to which they are bound join to form an optionally

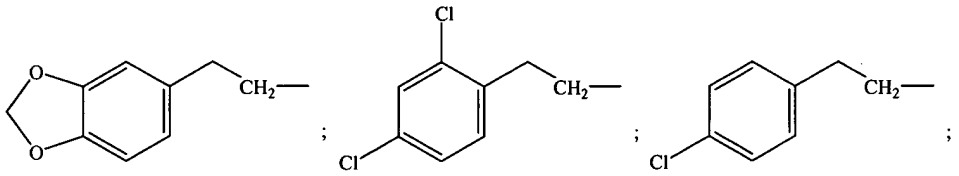
substituted carbocyclic or heterocyclic fused ring system having a total of 9- or 10-ring atoms within said fused ring system.

2 (original): The method according to claim 1, wherein:

R_1 is a member selected from the group consisting of substituted alkylaryl, substituted aryl, substituted alkyl and substituted heterocyclic groups.

3 (original): The method according to claim 2, wherein:

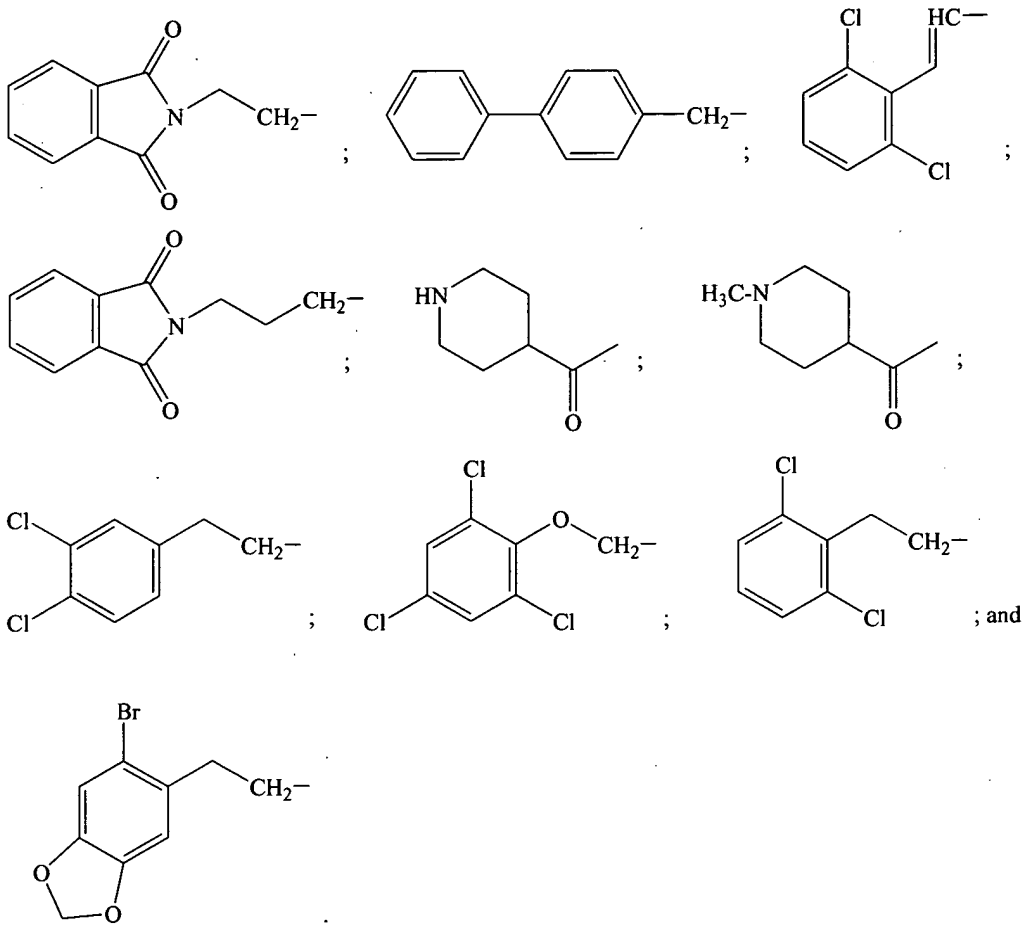
R_1 is a member selected from the group consisting of:



4 (original): The method according to claim 1, wherein:

R2 is a member selected from the group consisting of substituted alkyl, heterocyclic and substituted heterocyclic groups.

5 (previously presented): The method according to claim 4, wherein R_2 is a member selected from the group consisting of:

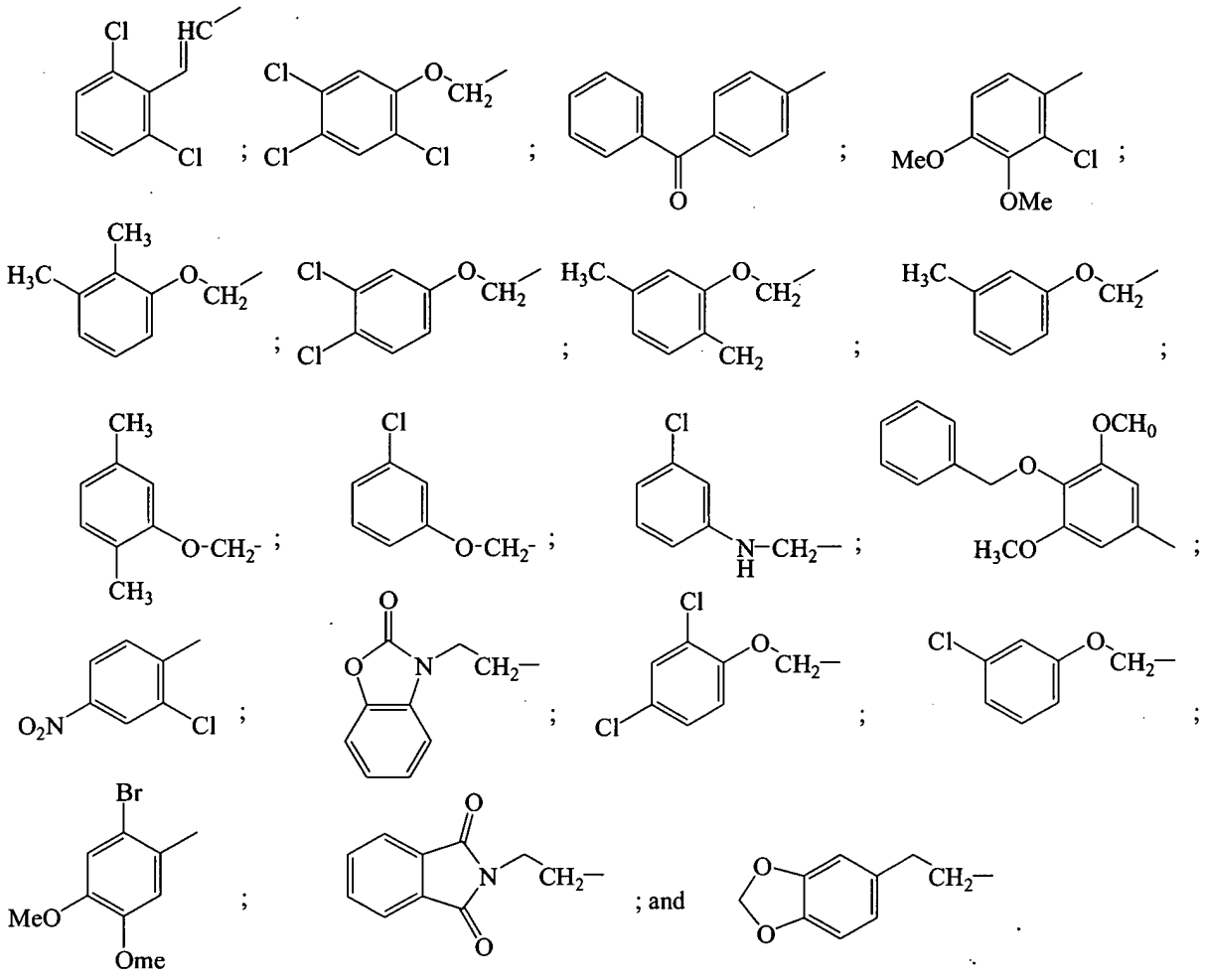


; and

6 (original): The method according to claim 1, wherein:

R_3 is a member selected from the group consisting of substituted alkyl and substituted aryl groups.

7 (original): The method according to claim 6, wherein R_3 is a member selected from the group consisting of:

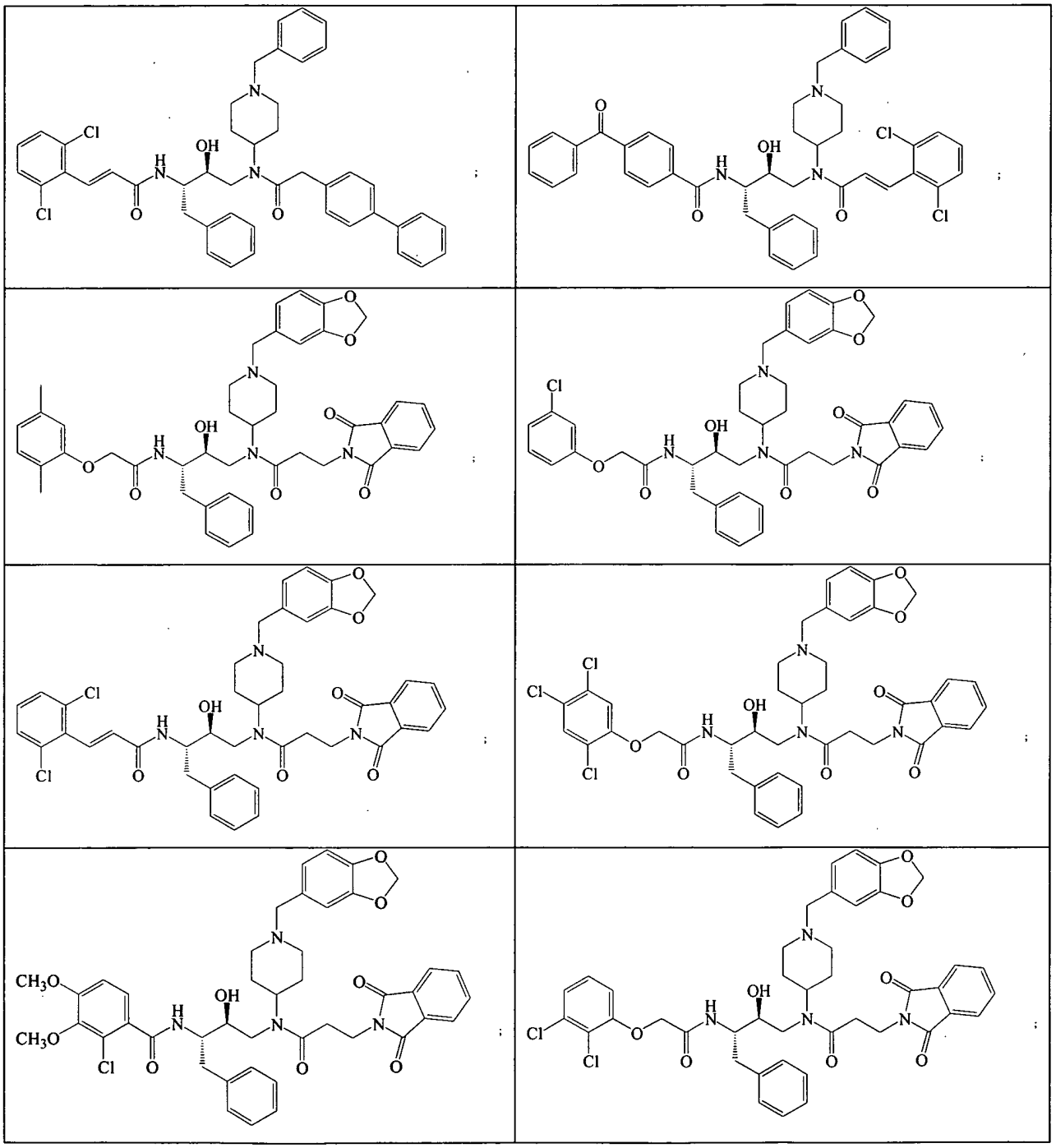


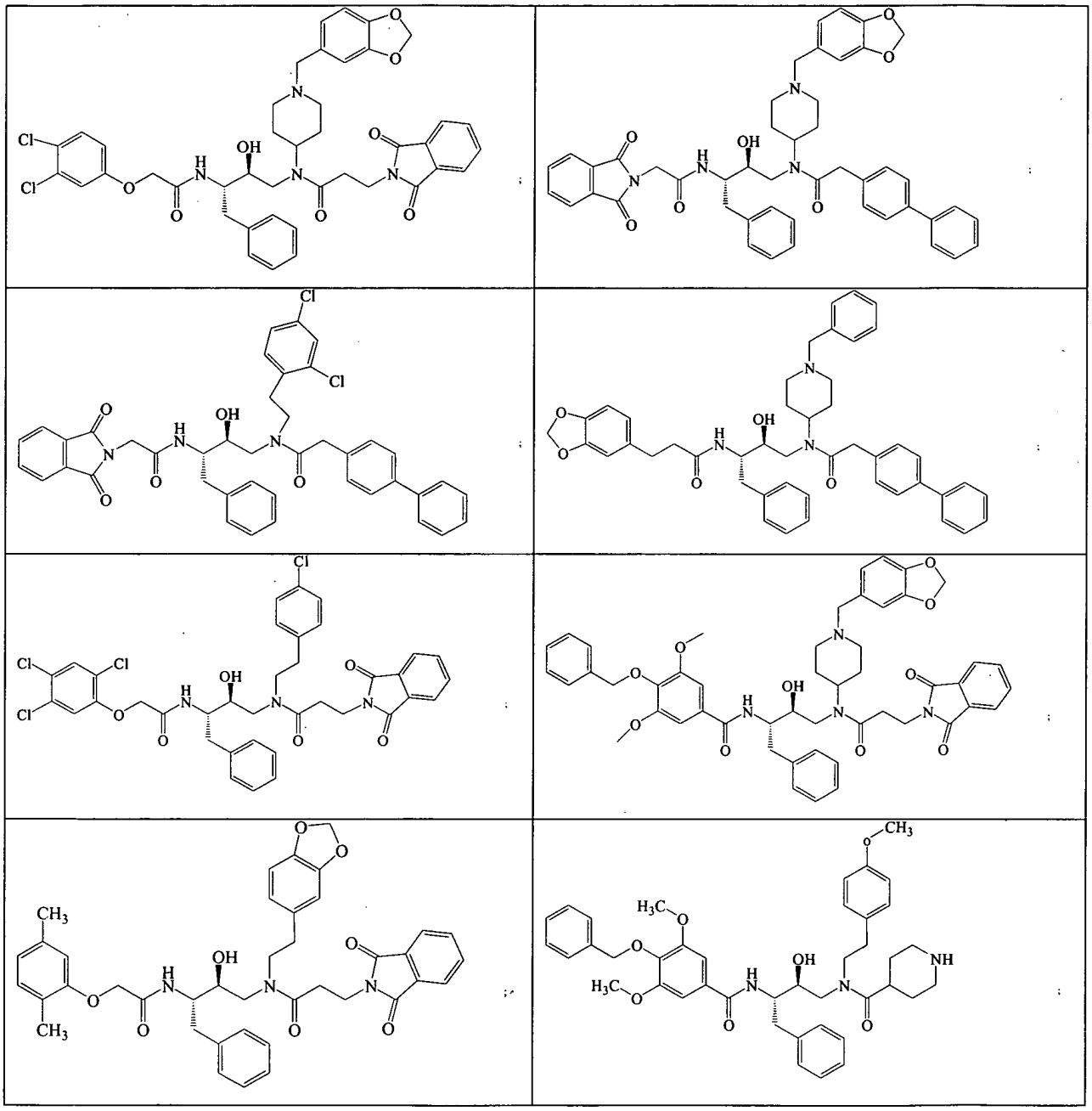
8 (original): The method according to claim 1, wherein R_5 and R_6 and the carbons to which they are bound form an optionally substituted napthalene ring.

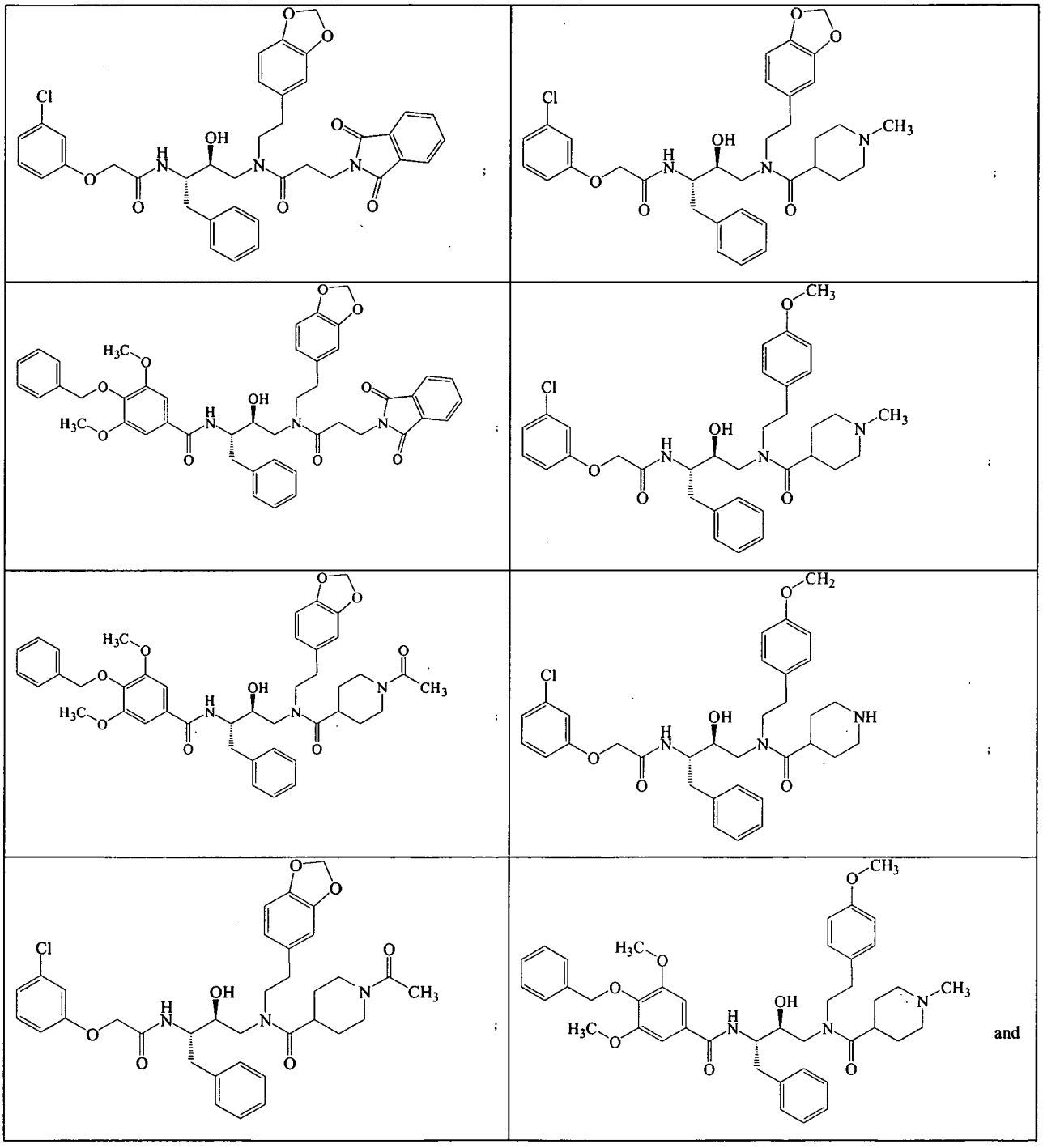
9 (original): The method according to claim 1, wherein R_5 and R_6 are both hydrogen.

10 (original): The method in accordance with claim 1, wherein R_5 is hydrogen and R_6 is meta or para to R_5 and is a member selected from the group consisting of halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl.

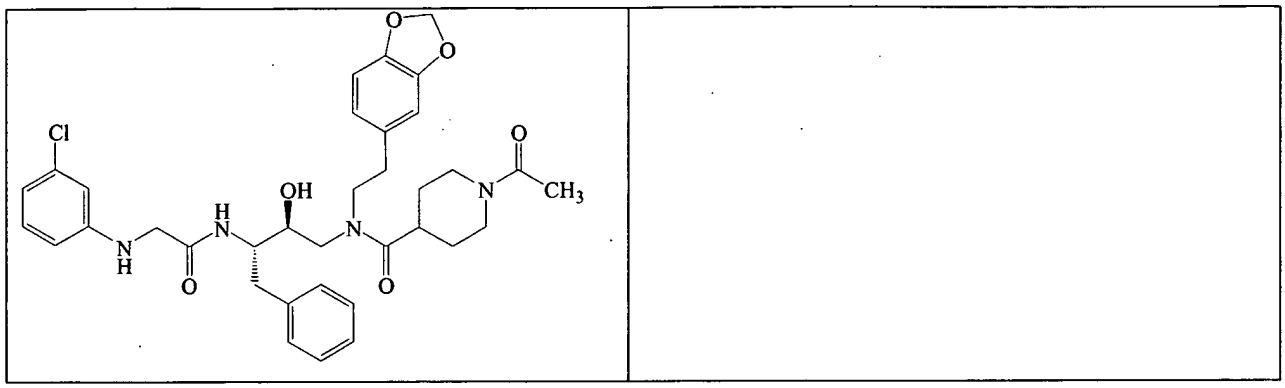
11 (original): The method according to claim 1, wherein said aspartyl protease inhibitor is a member selected from the group consisting of:



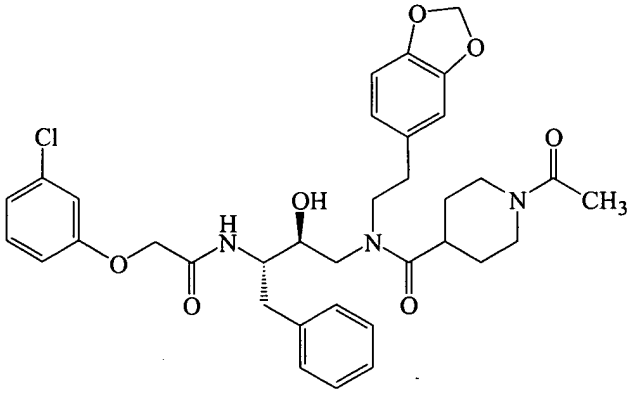




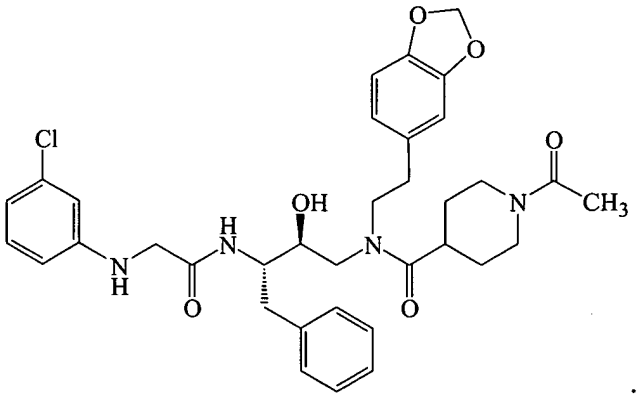
and



12 (original): The method according to claim 1, wherein said aspartyl protease inhibitor is a member selected from the group consisting of:

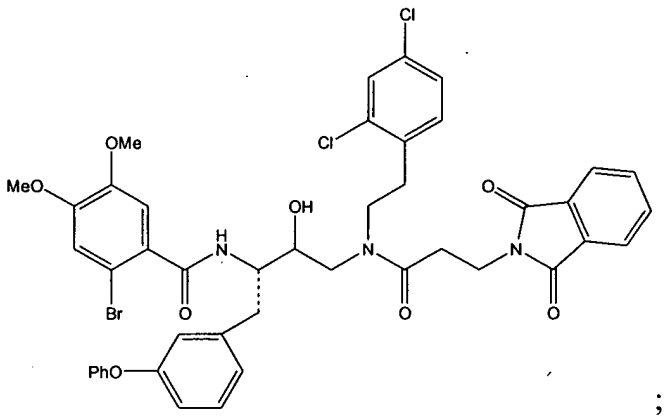


and



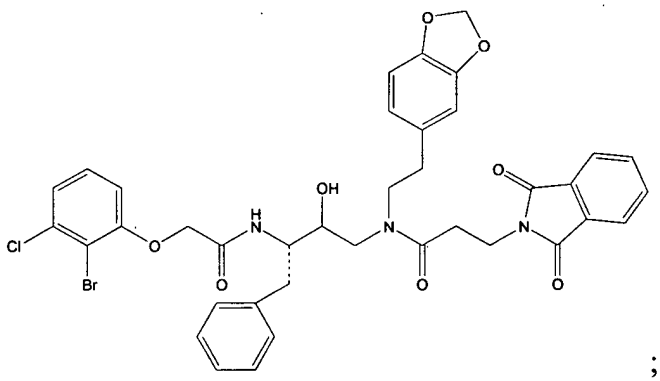
13 (previously presented): The method in accordance with claim 1, wherein said aspartyl protease inhibitor is a member selected from the group consisting of

CEL5-A having the following structure:



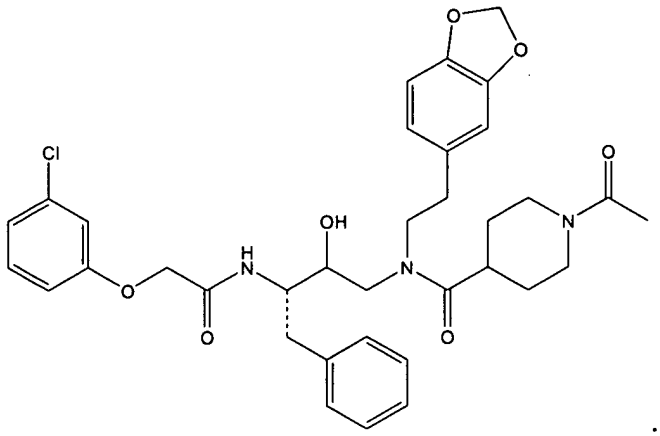
;

CEL5G having the following structure:



; and

EA 1 having the following structure:



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14 (original): The method in accordance with claim 1, wherein said composition is a body fluid.

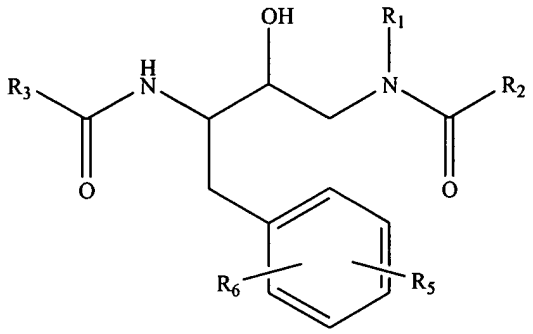
15 (previously presented): The method in accordance with claim 14, wherein said body fluid is cerebral spinal fluid.

16 (original): The method in accordance with claim 1, whereby formation of amyloidogenic Aβ peptides (Aβ) is decreased compared to the amount formed in the absence of said aspartyl protease inhibitor.

17 (original): The method in accordance with claim 1, whereby formation of α-sAPP is increased compared to the amount formed in the absence of said aspartyl protease inhibitor.

18 (original): The method in accordance with claim 1, wherein the modulation is effected by modulating the activity of cathepsin D.

19 (previously presented): A method for modulating the processing of a tau-protein (τ-protein), said method comprising contacting a composition containing said τ-protein with an aspartyl protease inhibitor having the formula:



(I)

wherein:

R_1, R_2 and R_3 are members independently selected from the group consisting of alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl, substituted aryloxyalkyl, heteroaryl, substituted heteroaryl, heteroarylalkyl, substituted heteroarylalkyl, heterocycles, substituted heterocycles, heterocyclicalkyl and substituted heterocyclicalkyl; and

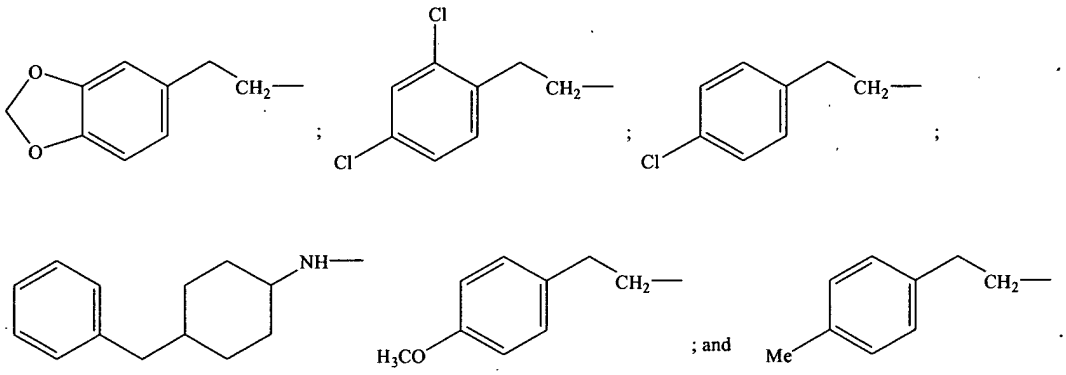
R_5 and R_6 are independently selected from the group consisting of hydrogen, halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl; or R_5 and R_6 and the carbons to which they are bound join to form an optionally substituted carbocyclic or heterocyclic fused ring system having a total of 9- or 10-ring atoms within said fused ring system.

20 (original): The method according to claim 19, wherein:

R_1 is a member selected from the group consisting of substituted alkylaryl, substituted aryl, substituted alkyl and substituted heterocyclic groups.

21 (original): The method according to claim 20, wherein:

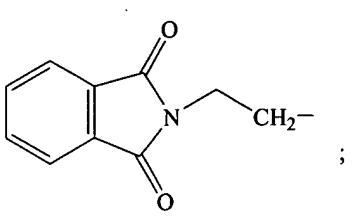
R_1 is a member selected from the group consisting of:



22 (original): The method according to claim 19, wherein:

R_2 is a member selected from the group consisting of substituted alkyl, heterocyclic and substituted heterocyclic groups.

23 (previously presented): The method according to claim 22, wherein R_2 is a member selected from the group consisting of: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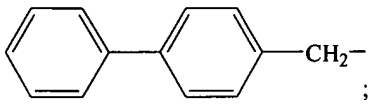
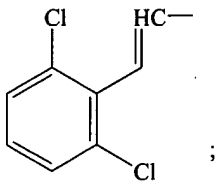
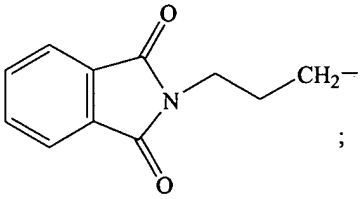
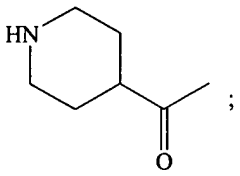

;

;

;

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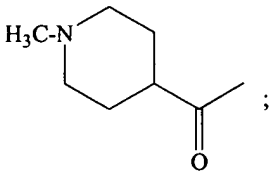
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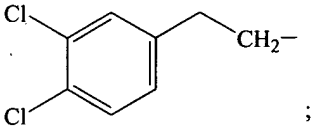
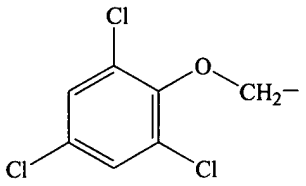
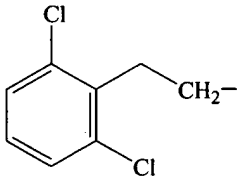
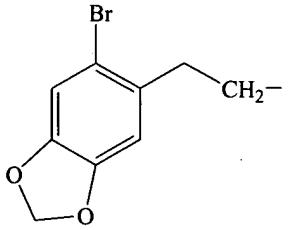
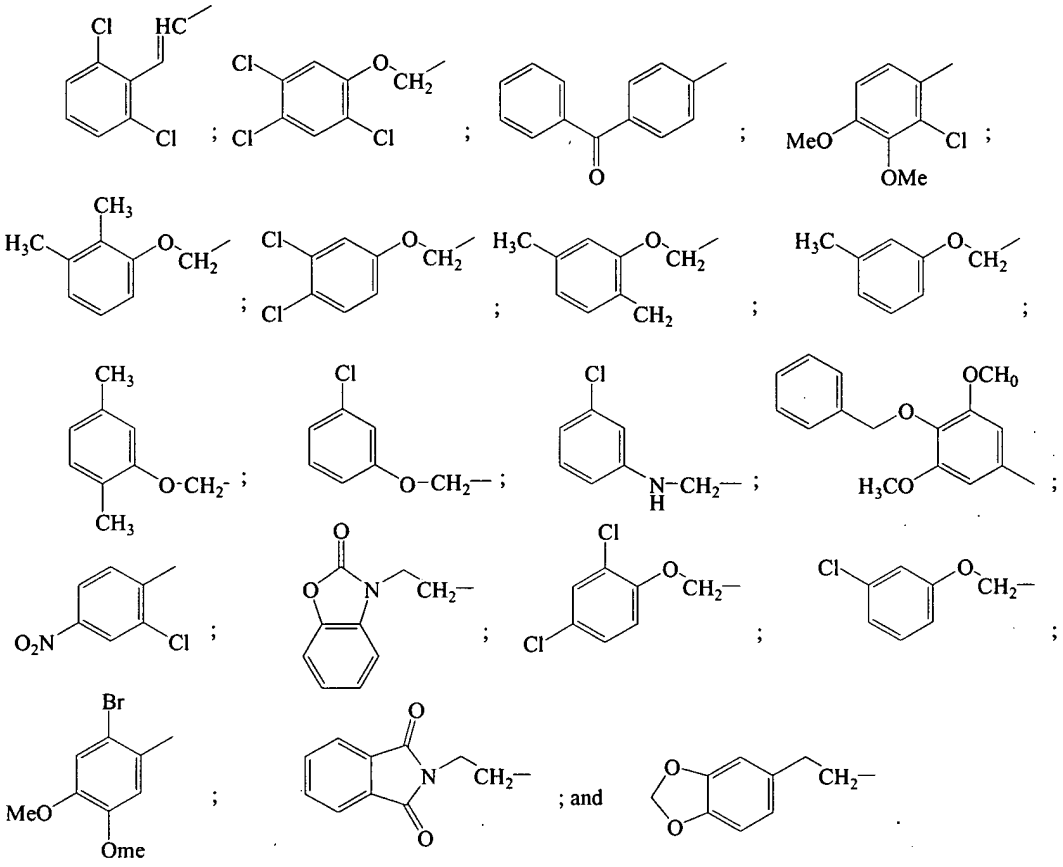

;

;

; and


24 (original): The method according to claim 19, wherein:

R_3 is a member selected from the group consisting of substituted alkyl and substituted aryl groups.

25 (original): The method according to claim 24, wherein R_3 is a member selected from the group consisting of:

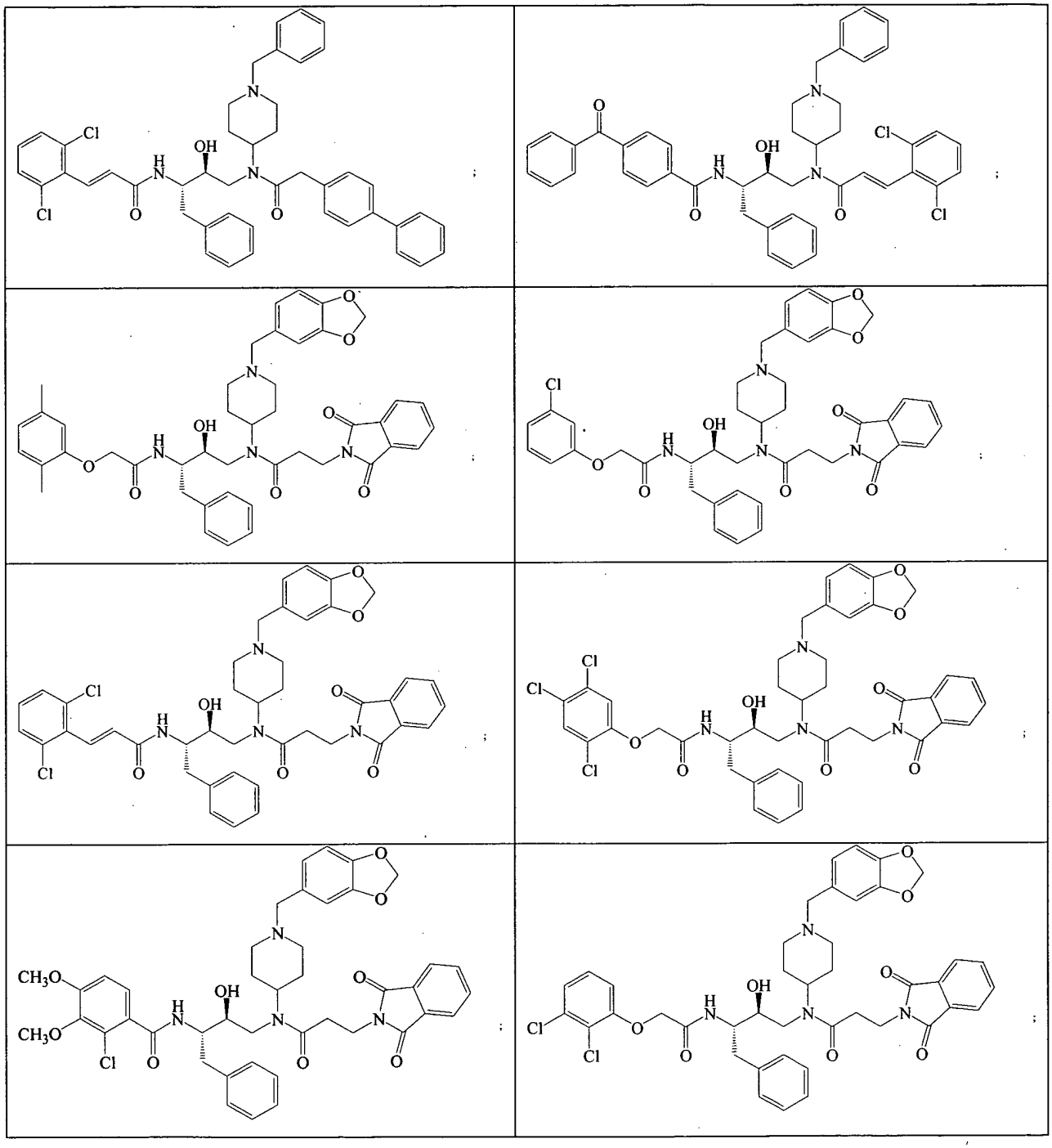


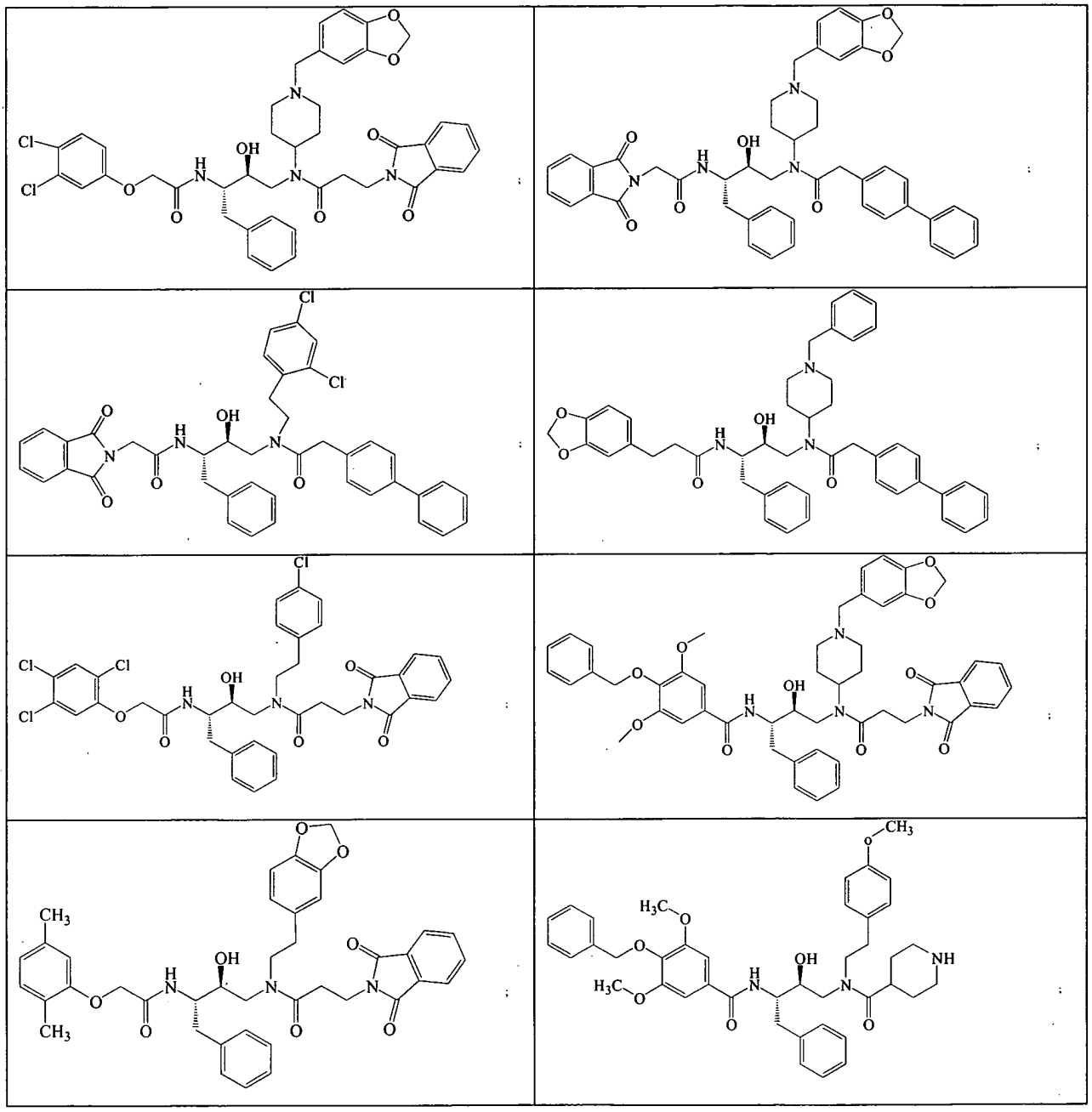
26 (original): The method according to claim 19, wherein R_5 and R_6 and the carbons to which they are bound form an optionally substituted napthalene ring.

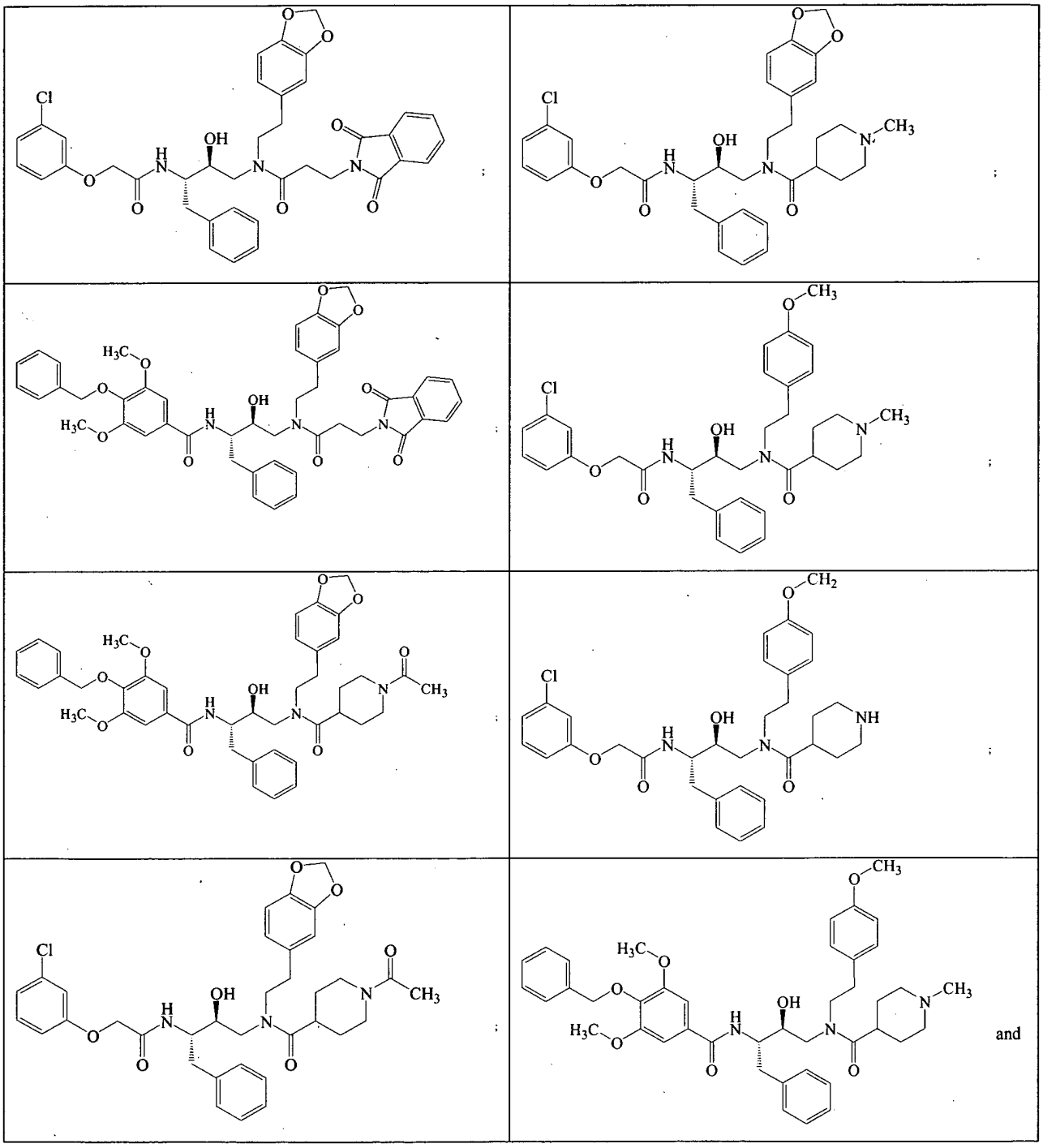
27 (original): The method according to claim 19, wherein R_5 and R_6 are both hydrogen.

28 (original): The method in accordance with claim 19, wherein R_5 is hydrogen and R_6 is meta or para to R_5 and is a member selected from the group consisting of halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl.

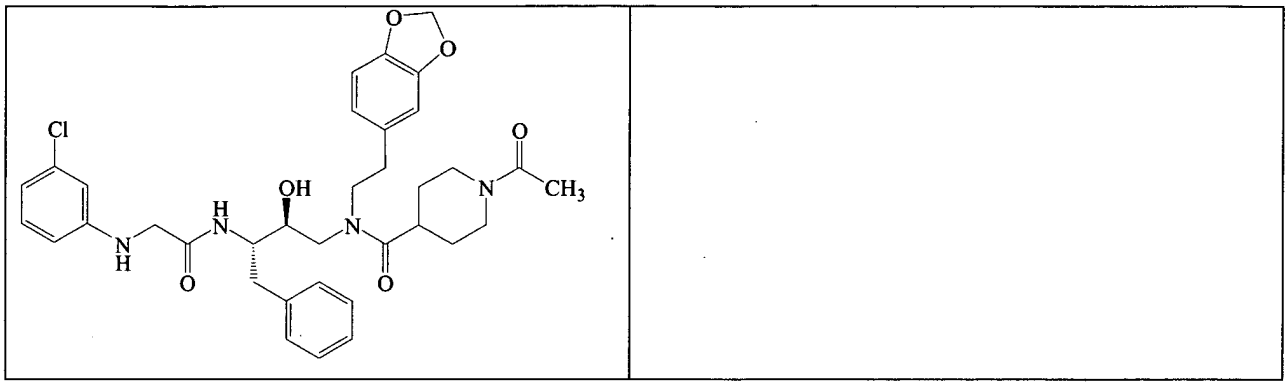
29 (original): The method according to claim 19, wherein said aspartyl protease inhibitor is a member selected from the group consisting of:



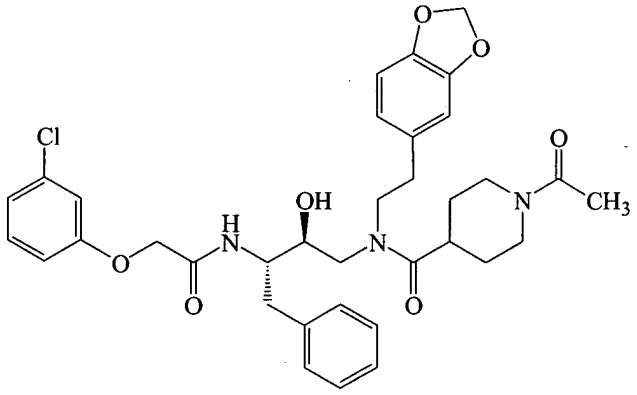




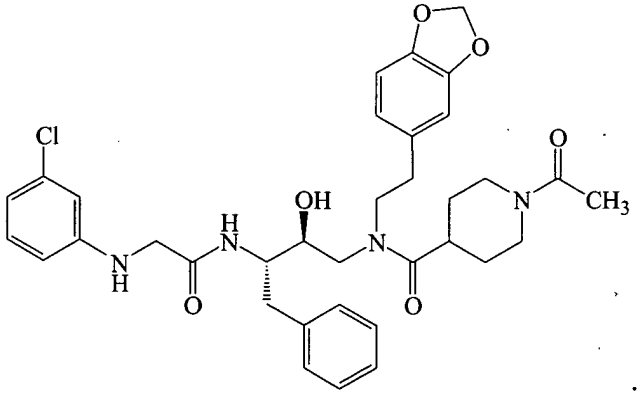
and



30 (original): The method according to claim 19, wherein said aspartyl protease inhibitor is a member selected from the group consisting of:

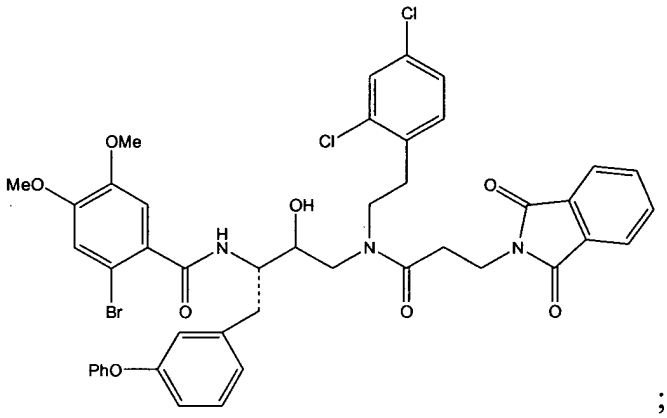


and



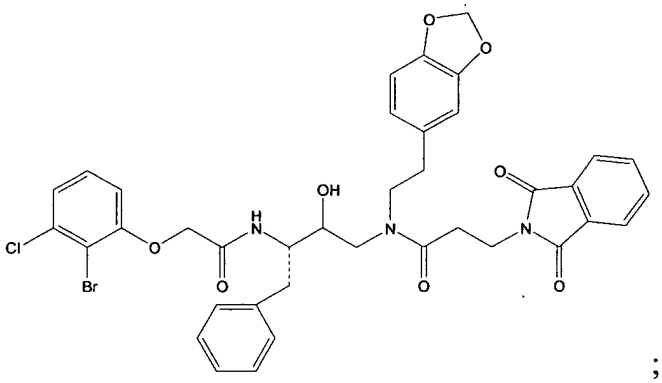
31 (previously presented): The method in accordance with claim 19, wherein said aspartyl protease inhibitor is a member selected from the group consisting of

CEL5-A having the following structure:



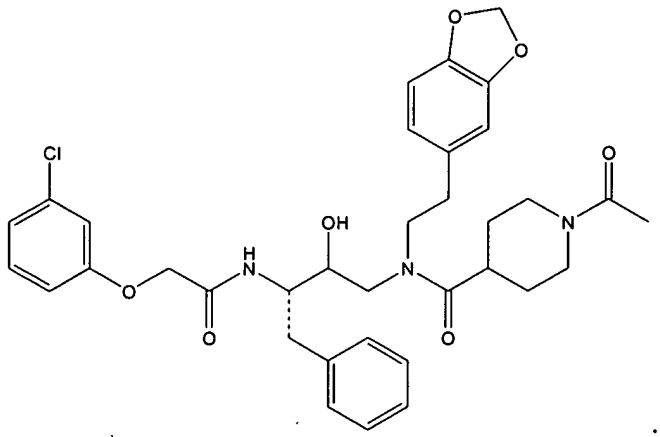
;

CEL5G having the following structure:



; and

EA 1 having the following structure:



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32 (original): The method in accordance with claim 19, wherein said composition is a body fluid.

33 (previously presented): The method in accordance with claim 32, wherein said body fluid is cerebral spinal fluid.

34 (original): The method in accordance with claim 19, whereby formation of τ-fragments is decreased compared to the amount formed in the absence of said aspartyl protease inhibitor.

35 (original): The method in accordance with claim 19, wherein the modulation is effected by modulating the activity of cathepsin D.

36-50 (canceled)